

This is an abbreviation of information found at:

<http://www.nidcd.nih.gov/tools/printer.asp?ref=http://www.nidcd.nih.gov/health/hearing/otitismedia.asp>

What is otitis media?

Otitis media is an ear infection. Three out of four children experience otitis media by the time they are 3 years old. In fact, ear infections are the most common illnesses in babies and young children.

How does otitis media happen?

Otitis media usually happens when viruses and/or bacteria get inside the ear and cause an infection. It often happens as a result of another illness, such as a cold. If your child gets sick, it might affect his or her ears.

It is harder for children to fight illness than it is for adults, so children develop ear infections more often. Some researchers believe that other factors, such as being around cigarette smoke, can contribute to ear infections.

What's happening inside the ear when my child has an ear infection?

When the ears are infected the **eustachian tubes** become inflamed and swollen. The **adenoids** can also become infected.

- The eustachian tubes are inside the ear. They keep air pressure stable in the ear. These tubes also help supply the ears with fresh air.
- The adenoids are located near the eustachian tubes. Adenoids are clumps of cells that fight infections.

Swollen and inflamed eustachian tubes often get clogged with fluid and mucus from a cold. If the fluids plug the openings of the eustachian tubes, air and fluid get trapped inside the ear. These tubes are smaller and straighter in children than they are in adults. This makes it harder for fluid to drain out of the ear and is one reason that children get more ear infections than adults. The infections are usually painful.

Adenoids are located in the throat, near the eustachian tubes. Adenoids can become infected and swollen. They can also block the openings of the eustachian tubes, trapping air and fluid. Just like the eustachian tubes, the adenoids are different in children than in adults. In children, the adenoids are larger, so they can more easily block the opening of the eustachian tube.

Can otitis media affect my child's hearing?

Yes. An ear infection can cause temporary hearing problems. Temporary speech and language problems can happen, too. If left untreated, these problems can become more serious.

How do I know if my child has otitis media?

It is not always easy to know if your child has an ear infection. Sometimes you have to watch carefully. Your child may get an ear infection before he or she has learned how to talk. If your child is not old enough to say, "My ear hurts," you need to look for other signals that there is a problem. Here are a few signs your child might show you if he or she has otitis media:

- Does she tug or pull at her ears?
- Does he cry more than usual?
- Do you see fluid draining out of her ears?
- Does he have trouble sleeping?
- Can she keep her balance?

- Does he have trouble hearing?
- Does she seem not to respond to quiet sounds?

A child with an ear infection may show you any of these signs. If you see any of them, call a doctor.

What will a doctor do?

Your doctor will examine your child's ear. The doctor can tell you for sure if your child has an ear infection. The doctor may also give your child medicine. Medicines called **antibiotics** are sometimes given for ear infections. It is important to know how they work. Antibiotics only work against organisms called **bacteria**, which can cause illness. Antibiotics are not **effective** against viruses, such as those associated with a cold. In order to be effective, antibiotics must be taken until they are finished. A few days after the medicine starts working, your child may stop pulling on his or her ear and appear to be feeling better. This does not mean the infection is gone. The medicine must still be taken. If not, the bacteria can come back. You need to follow the doctor's directions exactly.

Your doctor may also give your child pain relievers, such as acetaminophen. Medicines such as antihistamines and decongestants do not help in the prevention or treatment of otitis media.

Will my child need surgery?

Some children with otitis media need surgery. The most common surgical treatment involves having small tubes placed inside the ear. This surgery is called a **myringotomy**. It is recommended when fluids from an ear infection stay in the ear for several months. At that stage, fluid may cause hearing loss and speech problems. A doctor called an **otolaryngologist** (ear, nose, and throat surgeon) will help you through this process if your child needs an operation. The operation will require anesthesia.

In a myringotomy, a surgeon makes a small opening in the ear drum. Then a tube is placed in the opening. The tube works to relieve pressure in the clogged ear so that the child can hear again. Fluid cannot build up in the ear if the tube is venting it with fresh air.

After a few months, the tubes will fall out on their own. In rare cases, a child may need to have a myringotomy more than once.

Another kind of surgery removes the adenoids. This is called an **adenoidectomy**. Removing the adenoids has been shown to help some children with otitis media who are between the ages of 4 and 8. We know less about whether this can help children under age 4.

What else can I do for my child?

Here are a few things you can do to lower your child's risk of getting otitis media. The best thing you can do is to **pay attention** to your child. Know the warning signs of ear infections, and be on the lookout if your child gets a cold. If you think your child has an ear infection, call the doctor.

Do not smoke around your child. Smoke is not good for the delicate parts inside your child's ear.